

FIGURE 1

Types of Bonds Occurring in a Mucous Gel

1. COVALENT BONDS

- glycoprotein subunits are linked primarily by intramolecular S-S bonds

2. IONIC BONDS

- mucin macromolecules have both positive and negative fixed charges, which are capable of interacting

3. HYDROGEN BONDS

- H-bonds link the oligosaccharide side-chains

4. VAN DER WAALS' FORCES

- interdigitation between oligosaccharide moieties may be important

5. INTERMINGLING

- physical entanglements between mucin macromolecules

6. EXTRACELLULAR DNA & F-ACTIN

- parallel network formation in infection

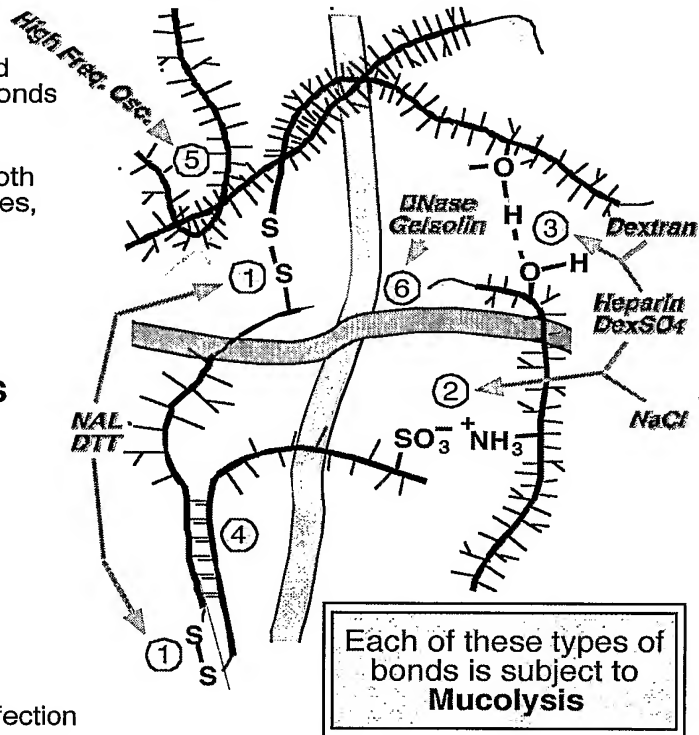


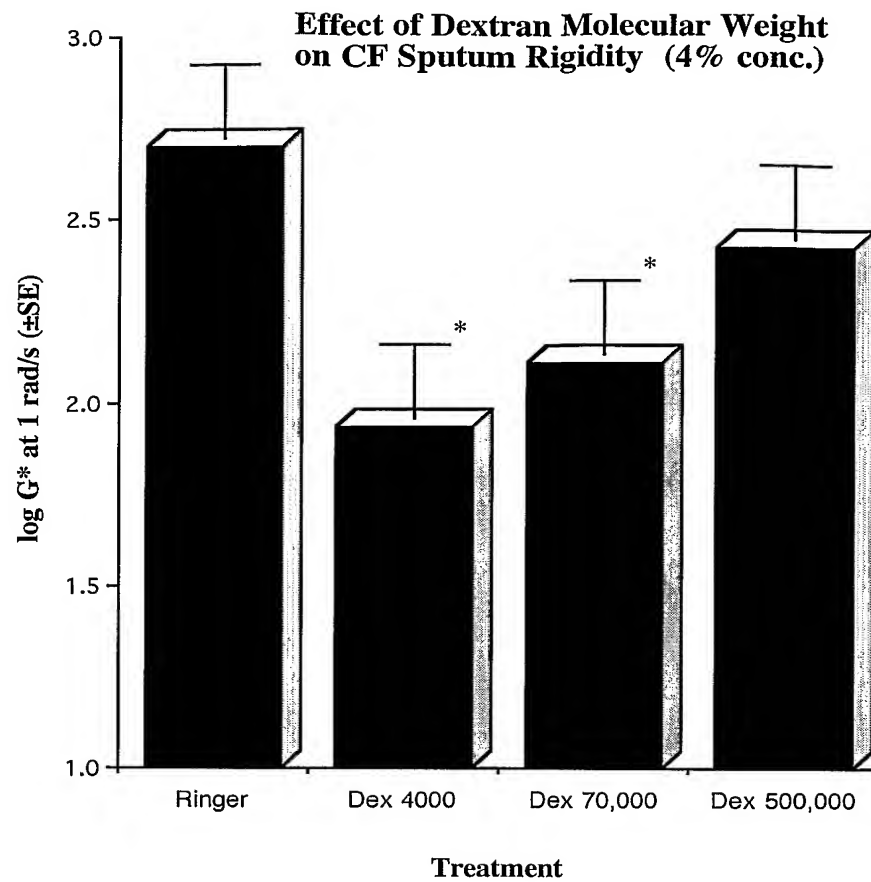
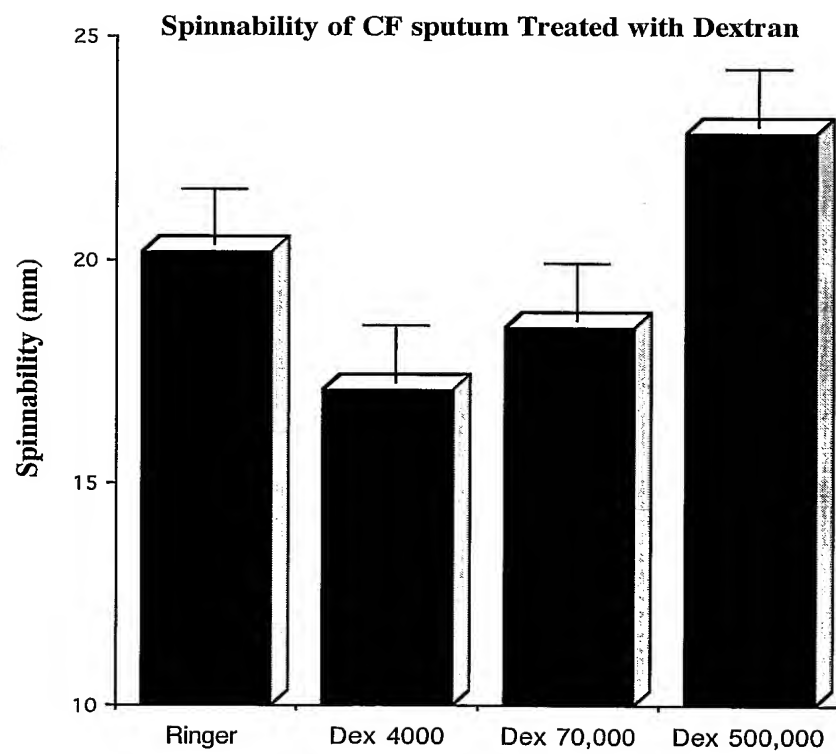
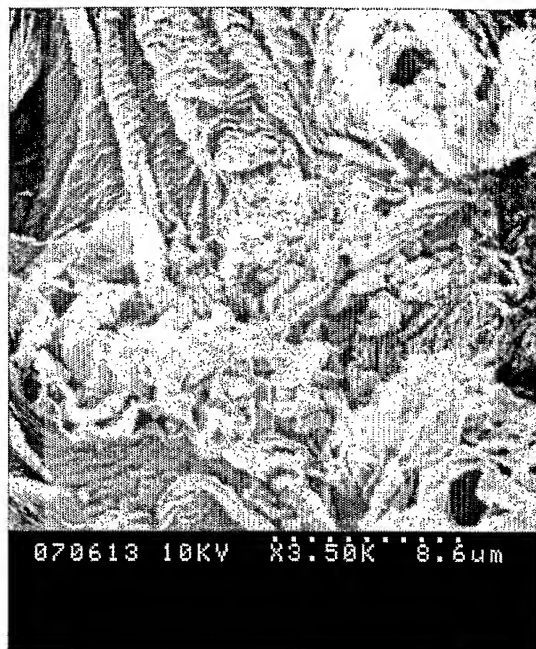
FIGURE 2**A****B**

FIGURE 3

A



B

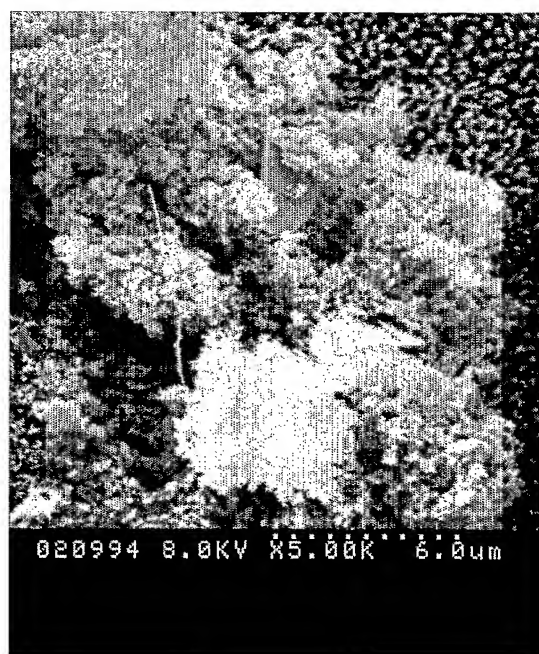


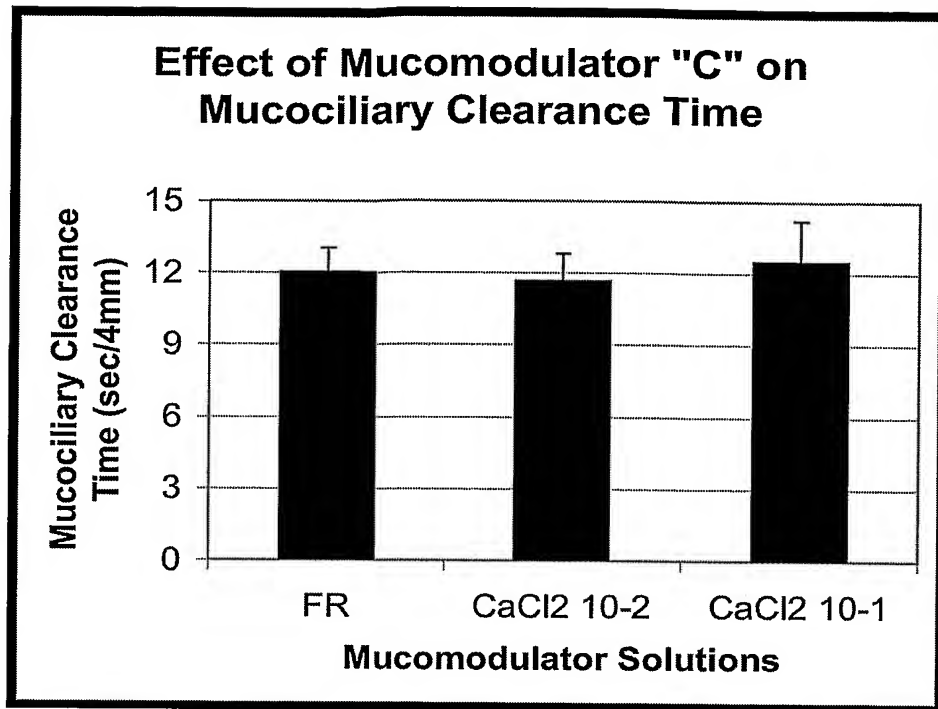
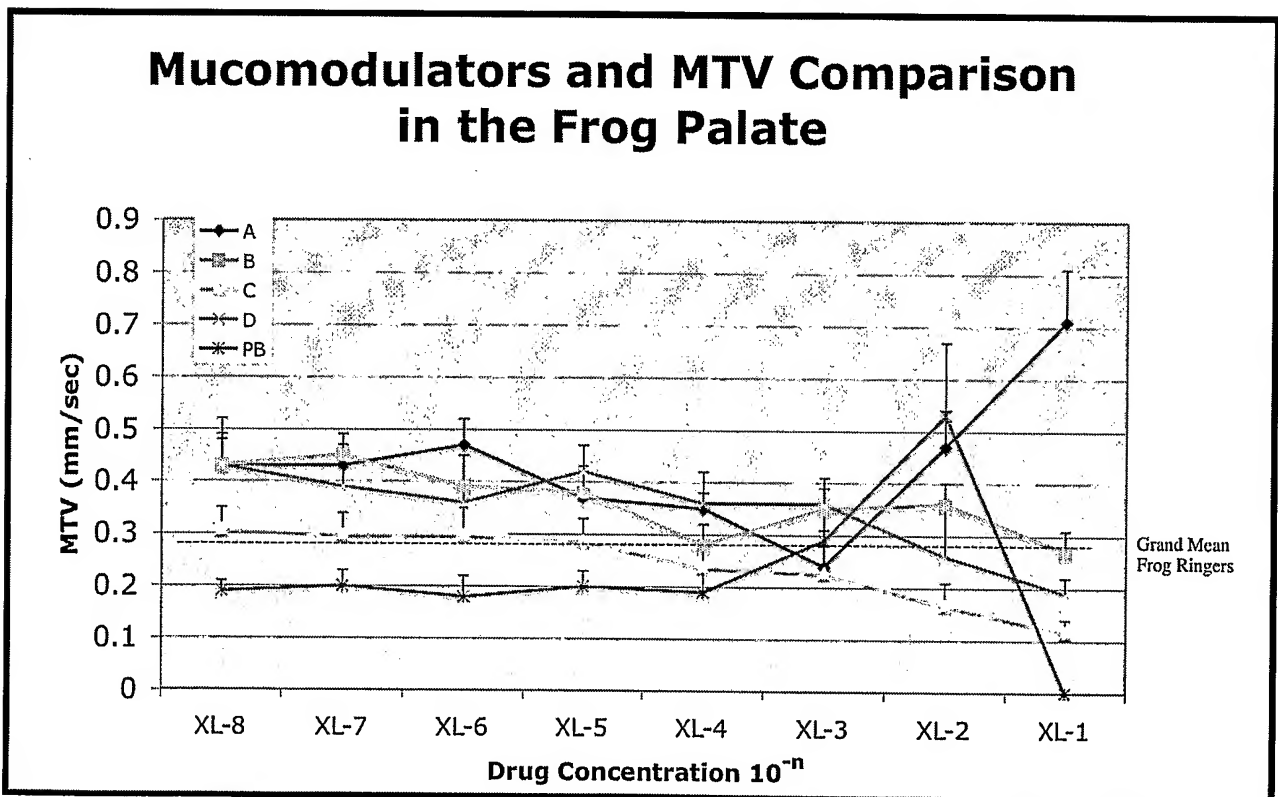
FIGURE 4**A****B:**

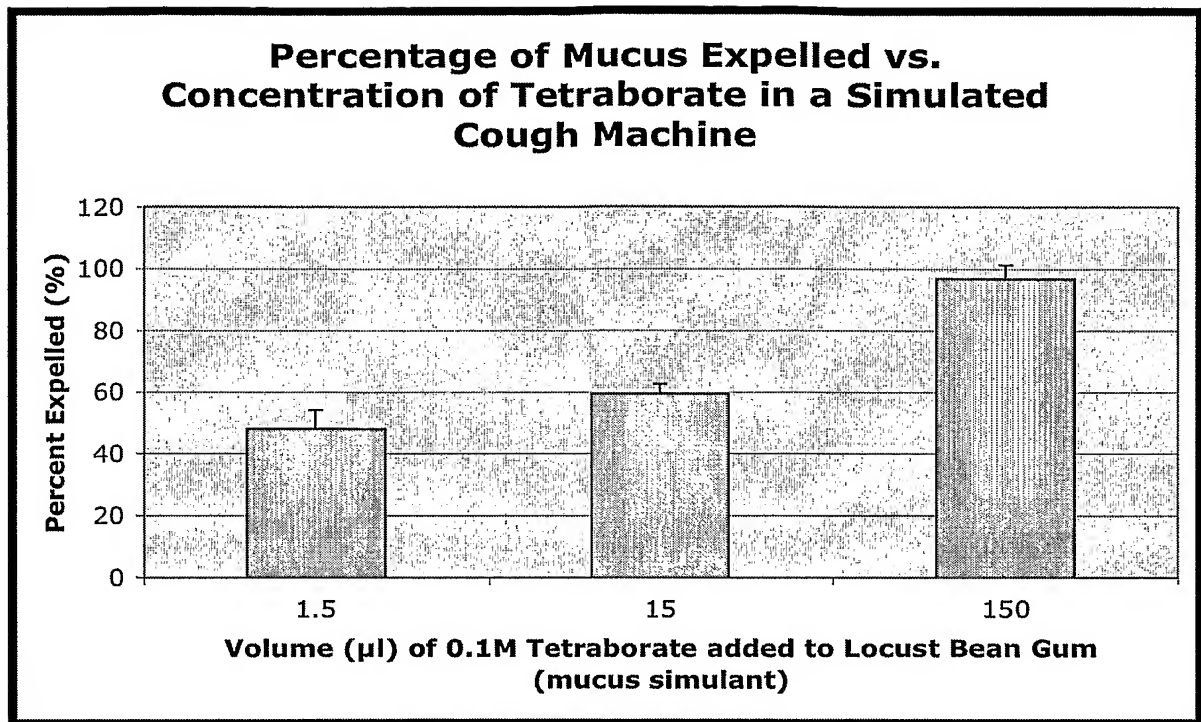
FIGURE 5

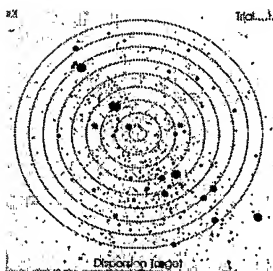
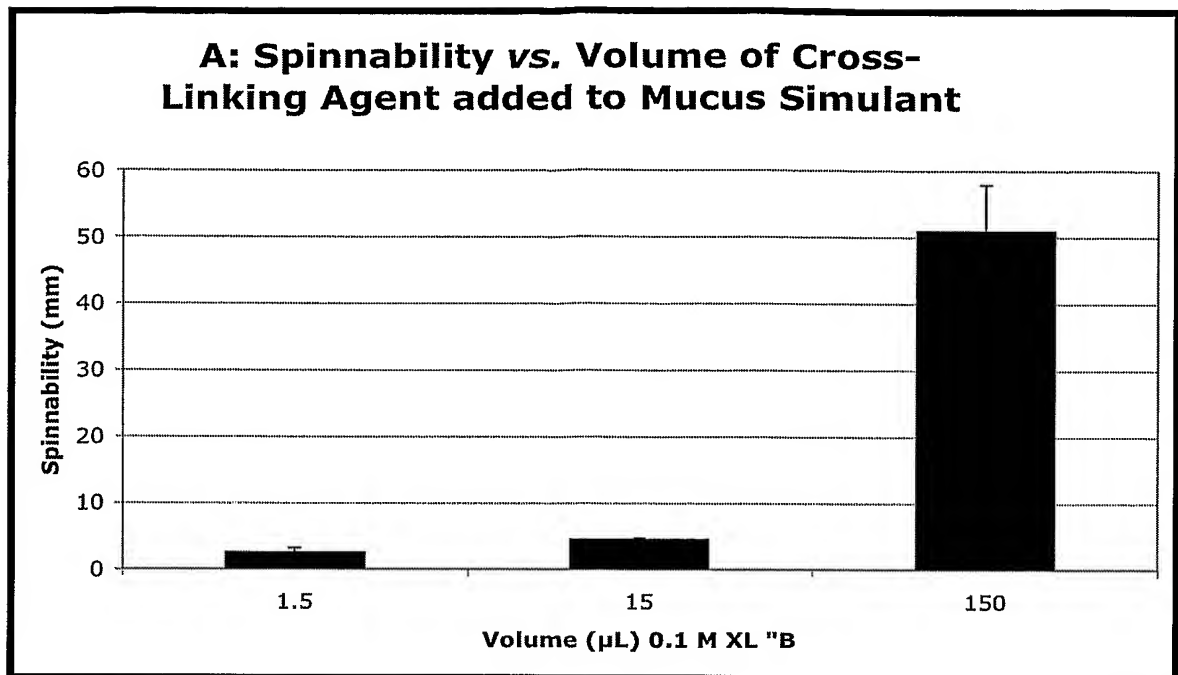
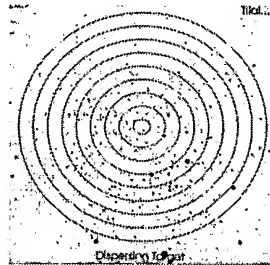
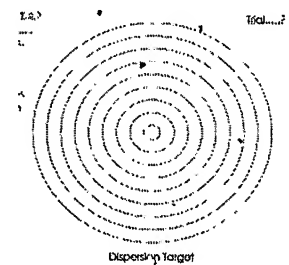
FIGURE 6**1.5 μl****15 μl****150 μl**

FIGURE 7